

TRAFFIC AND PARKING IMPACT ASSESSMENT

Proposed community centre

1164 Coxs Creek Road, Coxs Creek

Prepared for: Rylstone Regional Community

N221852A (Version 1a)

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1. INTRODUCTION

Motion Traffic Engineers was commissioned by Rylstone Regional Community to undertake a traffic and parking impact assessment of a proposed community centre in 1164 Coxs Creek Road, Coxs Creek.

The site is currently vacant with no permanent structures in site.

This traffic report presents an assessment of the anticipated transport implications of the proposed development, with the following considerations:

- Background and existing traffic and parking conditions of the regional community hub site
- Assessment of the public transport network within the vicinity of the site
- Adequacy of car parking provision
- The projected traffic generation of the proposed development and;
- The transport impact of the proposed development on the surrounding road network.

In the course of preparing this assessment, the mixed-use site and its environs have been inspected, plans of the development are examined, all relevant traffic and parking data have been collected and analysed.

2. BACKGROUND AND EXISTING CONDITIONS OF THE PROPOSED SITE

2.1. Location and Land Use

The proposed regional hub site is located at 1164 Coxs Creek Road, Coxs Creek. The site is located East of Rylstone town centre and in a rural area with farms and natural vegetation. .

The immediate zoning of the site are predominantly *Environmental Management (C3) zone*. The site is located in *Environmental Management (C3) zone*.

Figures 1 and 2 show the location of the Proposed community centre from aerial and street map perspective respectively. Figure 2 also shows the location.

Figure 3 shows a photography of the site frontage taken from Coxs Creek Road.

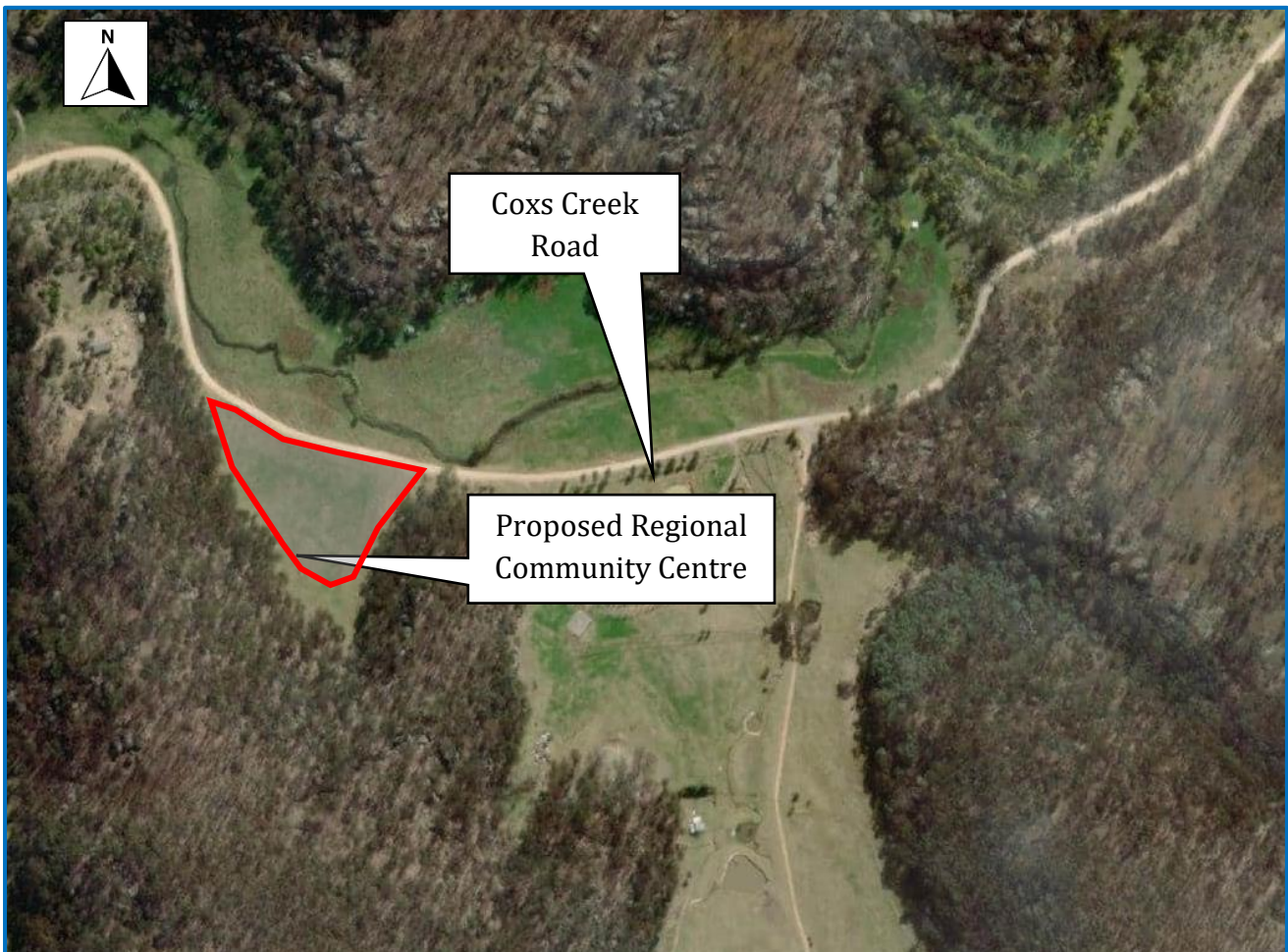


Figure 1: Location of the Proposed community centre on Aerial

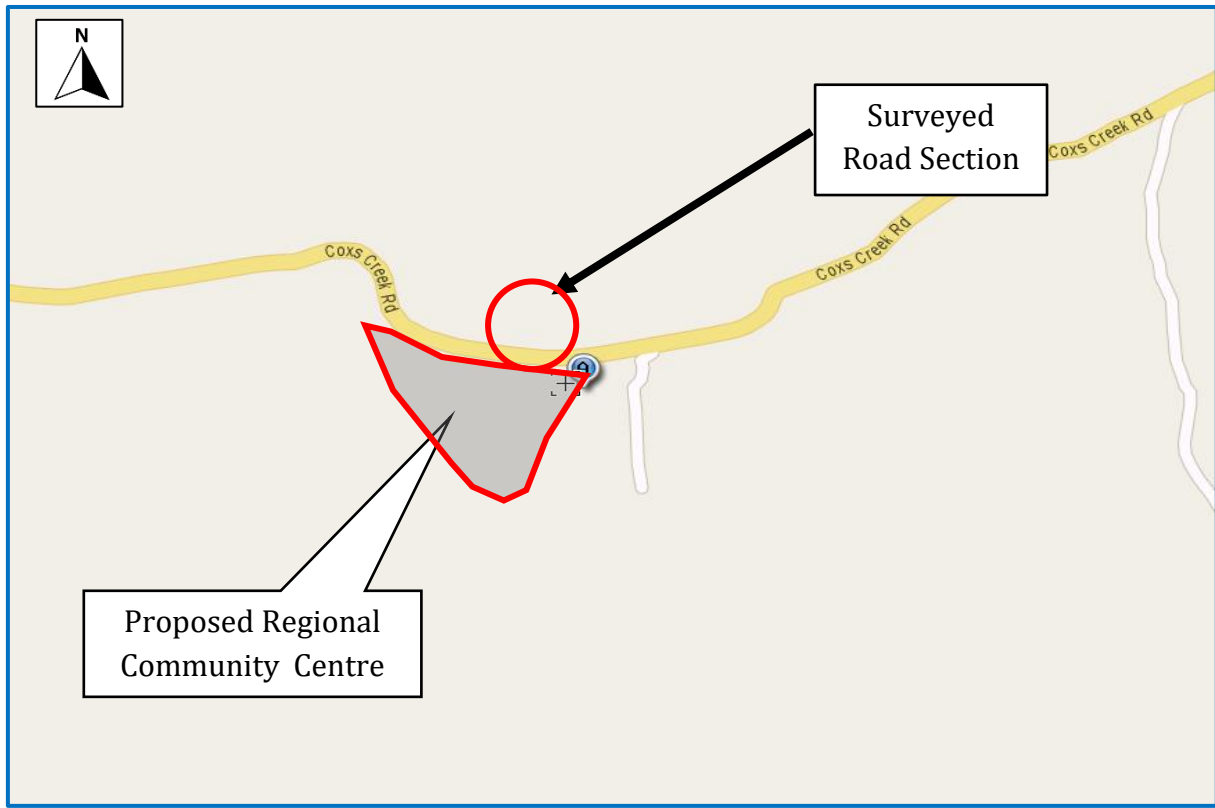


Figure 2: Location of the Proposed Mixed-use Development site on Aerial



Figure 3: Photograph of the Site from Coxs Creek Road

2.2. Road Network

This section discusses the road network adjacent to the community centre..

Coxs Creek Road is a two-way unsealed rural road but is not wide enough for two -way travel. Drivers give way to way to each other with a vehicle parked partly on the road shoulder. This road arrangement is suitable to low traffic volumes. The default speed limit of 60km/hr. The road shoulder is also used for emergency parking (only).

It is noted that Cox Creek Road will be sealed and upgraded in June 2023. Cox Creek Road will be one lane each. The report was written before the road upgrade.



Figure 4a shows a photograph of Coxs Creek Road adjacent to the Community Centre

2.3. Traffic Assessment

As part of the traffic impact assessment a midblock assessment of the adjacent road section. There are no nearby intersections to assess.

The midblock assessment is in the form of volume-capacity ratio for a peak hour.

The capacity of Coxs Creek Road on an hourly basis is an estimated 100 per hour and takes into account that Coxs Creek Road is an unsealed road but is not wide enough for simultaneous two-way travel.

A volume-capacity ratio of greater than 0.85 indicates delays, queuing, tail-gating and low speeds.

2.4. Existing Traffic Volume

As part of the traffic assessment, traffic counts have been undertaken at the midblock of Coxs Creek Road for the Saturday peak hour (midday to 1pm) and Weekday PM peak hour (5pm to 6pm).

The Saturday peak hour is the expected arrival hour for a community event around lunchtime. The weekday PM peak hour is the arrival hour for an early event. The traffic survey were undertaken in 2023.

The following Figures present the traffic volumes in vehicles for the weekday peak hours. The traffic volumes are low on Coxs Creek Road and reflects a rural un-sealed road. A higher traffic volume, as an example, would require a sealed road with one- lane each with centre line marking each opposing lane.

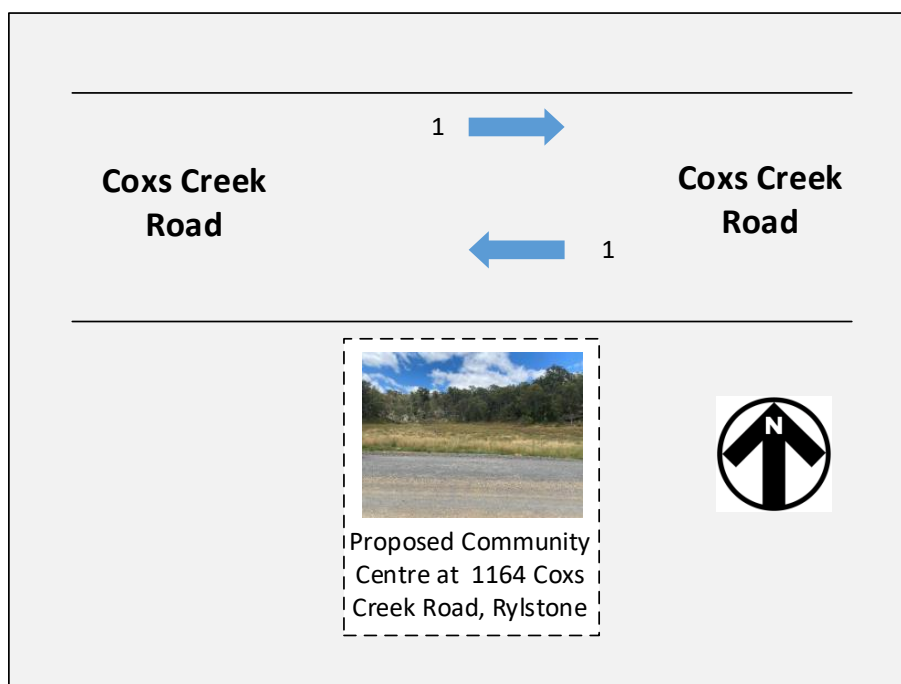


Figure 8a: Existing Saturday Traffic Volumes Peak Hour

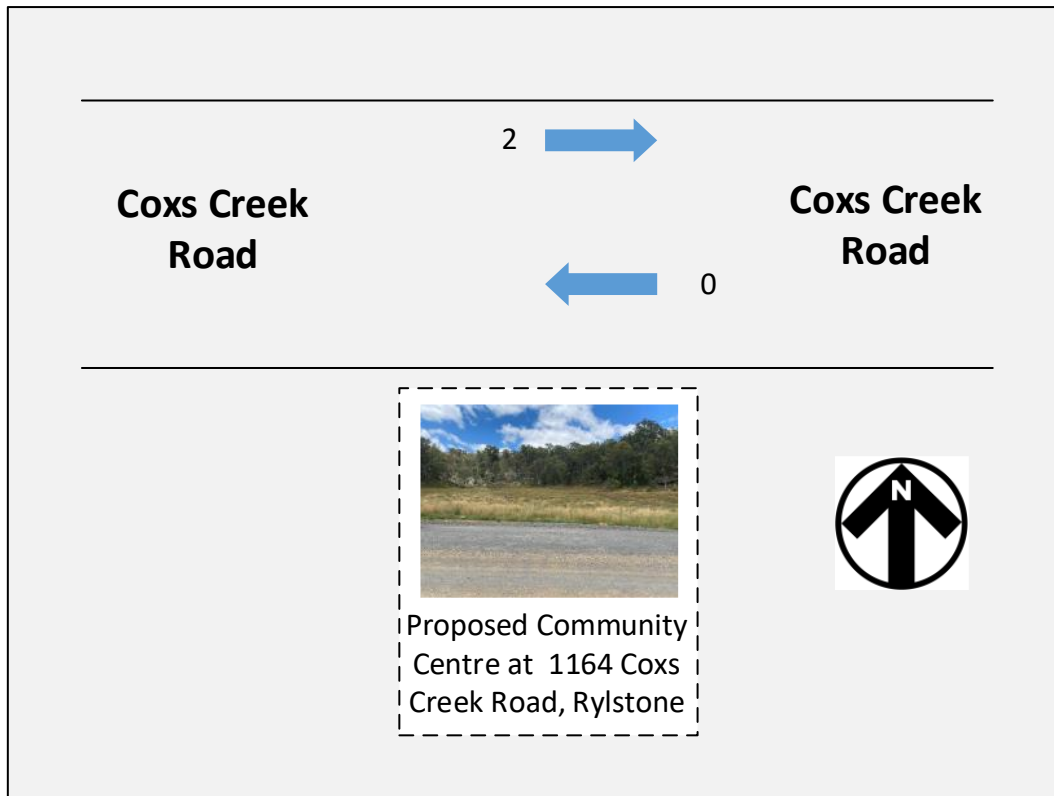


Figure 8b: Existing Weekday Traffic Volumes PM Peak Hour

As discussed previously, Cox Creek Road will be sealed and upgraded in June 2023. Cox Creek Road will be one lane each.

The road upgrade will improve road safety and reduce accidents. The road is unlikely to increase traffic volumes.

2.5. Midblock Assessment with Existing Traffic

The midblock assessment is in the form of volume-capacity ratio (degree of saturation) for a peak hour.

The capacity of Coxs Creek Road on an hourly basis is an estimated 100 per hour and takes into account that Coxs Creek Road is an unsealed road but is not wide enough for simultaneous two-way travel.

The traffic volumes for the Saturday and Weekday peak hours are low and the volume-capacity ratio is low and well under 0.85 at which congestion and delays occurs.

The existing volume-capacity ratio is below 0.85. There is spare capacity on Coxs Creek Road.

2.6. Conclusion of existing conditions

The proposed community centre is located in a rural area with access via Coxs Creek Road. This road is an un-sealed rural road with low traffic volumes. There is spare capacity on Coxs Creek Road/
Traffic Impact Assessment for a Proposed Community Centre

1164 Coxs Creek Road, Coxs Creek [N221852A Report 1a]



3. PROPOSED REGIONAL COMMUNITY CENTRE

A description of the development for which approval is now sought features the following elements:

- Construction of new Regional Community Centre

3.1. Business Premises

The proposed development consists of:

- Main Hall with 162m² GFA
- Meeting Hall
- Kitchen
- Storage Units

3.2. Parking

Parking is provided on ground floor. Access and egress to the ground level is via a two-way driveway runs off Coxs Creek Road.

- Ground floor: 30 car spaces with one accessible car space

3.3. Operational Details

The community centre will have activities outside of business/farm hours and generally on a weekday evening and on the weekend. The maximum attendance is 30 people and are people generally living in the local rural area. All attendees will drive.

As per other community centres, all members are “volunteers” and there are no staff (as in paid people). Members contribute to the operation of the community centre. The community centre is a “not for profit” organisation.

A full scaled plan of the proposed development is provided as part of the Development Application.

4. CAR PARKING REQUIREMENTS

The *Mid-Western Development Control Plan 2013* stipulates minimum car parking rates for many landuses but not for a community centre.

The proposed community centre is located in a rural area and **all** attendees will drive (or be a passenger) to and from the community centre.

The community centre is located in a rural area and the number of attendees will be relatively low.

The maximum attendance is 30 people and taking into account some people will car share (such as family members), then the provision of 30 car spaces is considered adequate.

One disabled car space is provided.

5. TRAFFIC GENERATION AND IMPACT

5.1. Proposed Traffic Generation

Neither the RTA Guide to Traffic Generating Developments nor *Mid-Western Development Control Plan 2013* provides information for trip generation for a community centre.

The trip generation is therefore based on the maximum car parking demand for the peak attendance events as presented in the previous section. The trip generation is 30 car trips in the weekday and Saturday peak hours.

The assessed hours are the arrival hours and hence 30 car trips will travel to the proposed community centre.

5.2. Existing with Community Centre Traffic

The additional community trips are assigned onto the local traffic network. The following figures present the existing with community centre traffic for the Saturday and weekday peak hour.

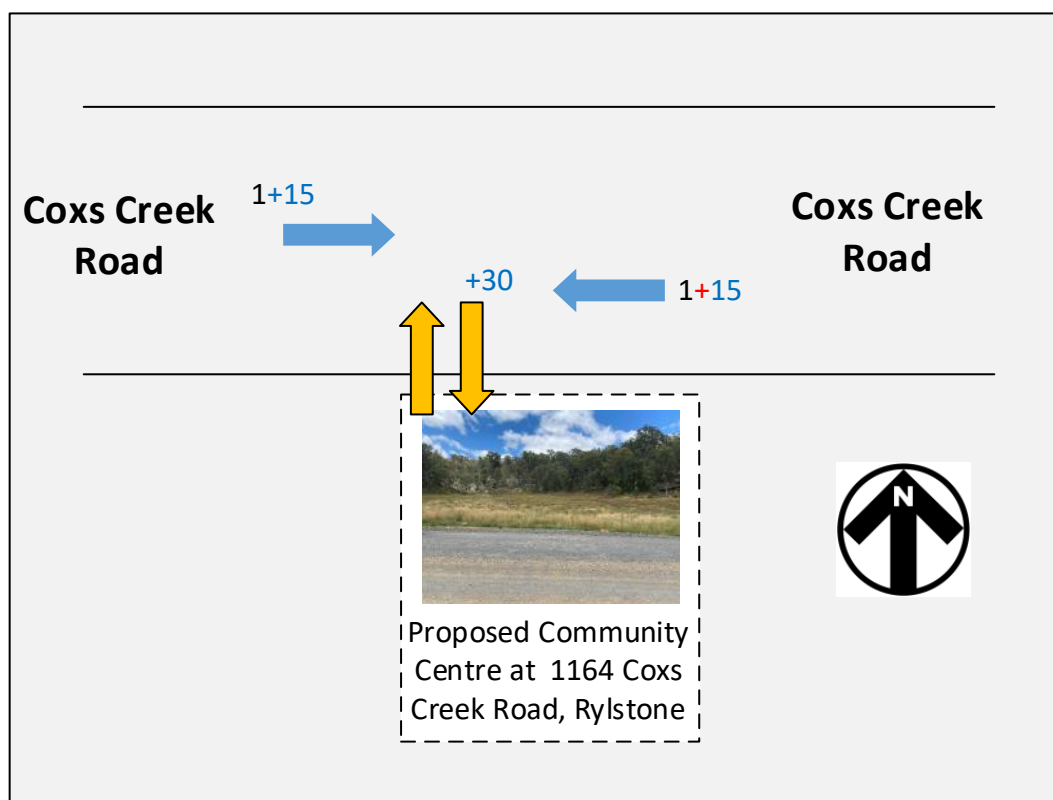


Figure 9a: Existing Saturday Peak Hour Traffic Volumes with Community Centre traffic

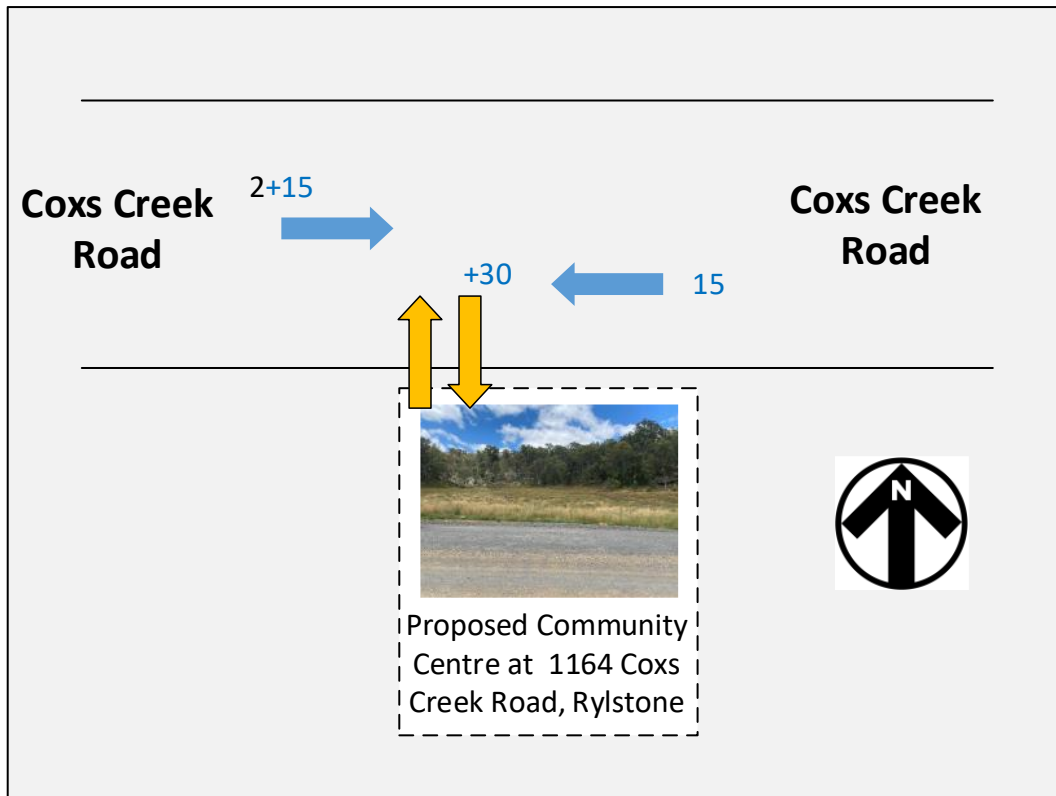


Figure 9a: Existing Weekday Peak Hour Traffic Volumes with Community Centre traffic

5.3. Traffic Impact

This section assesses the following road section for the existing traffic with the additional community traffic. The proposed community centre is a moderate trip generator which will not have any significant impact on the nearby traffic.

The capacity of Coxs Creek Road on an hourly basis is an estimated 100 per hour and takes into account that Coxs Creek Road is an unsealed road but is not wide enough for simultaneous two-way travel.

A volume-capacity ratio of greater than 0.85 indicates delays, queuing, tail-gating and low speeds.

The existing with community centre traffic volume-capacity ratio (degree of saturation) is below 0.85.

The traffic impacts of the proposed development are therefore considered acceptable.

6. CONCLUSIONS

This traffic impact assessment reports relates to a proposed community centre at *1164 Coxs Creek Road, Coxs Creek*. Based on the analysis and discussions presented in this report, the following conclusions are made:

- ➔ The proposed community centre is located in an *Environmental Management(C3) Zone* with good on-site parking opportunities.
- ➔ The existing traffic volume on Cox Creek Road is low and has spare capacity.
- ➔ The community centre will provide sufficient on-site car parking to accommodate all car parking demand.
- ➔ The proposed development is expected to generate moderate number of additional trips in the weekday and Saturday peak hours
- ➔ According to the midblock assessment, the additional trips can be accommodated

There are no traffic engineering reasons why a development consent for the proposed community centre at 1164 Coxs Creek Road, Coxs Creek should be refused.